



Montana Fish, Wildlife & Parks

1820 Meadowlark Lane, Butte, MT 59701

TO: Ken McDonald, files
FROM: Vanna Boccadori
DATE: 19 January 2012
RE: Mount Haggin WMA Habitat Restoration Project

In its design, the Mount Haggin WMA Habitat Restoration project had three objectives:

- Objective 1: Reduce the expansion of Douglas fir within bitterbrush communities in order to promote the health and regeneration of bitterbrush and associated plants important to wildlife, such as rough fescue.
- Objective 2: Reduce the expansion of Douglas fir and lodgepole pine within and surrounding aspen communities, in order to promote stand health and propagation of aspen.
- Objective 3: Remove stands of beetle-killed lodgepole pine in order to enhance the overall complexity of stand structure across the winter range, mitigate pine beetle infestation and generally improve forest health, and reduce forest fuel loads.

An Environmental Assessment was completed in January 2009 and FWP Commission approval of the project was granted in March 2009. After a few false starts, the project began in earnest in summer 2010. FWP contracted with Northwest Management Inc. to serve as the forester on the project. Sun Mountain Lumber out of Deer Lodge was awarded the bid for the project. Objectives 2 and 3 were completed in September 2011. Implementation of Objective 1 is 70% complete.

Details of the project area as follows:

- Approximately 70 of 100 acres of bitterbrush stands have been treated. Removal of Douglas fir trees smaller than 6 inches dbh has been by hand and mainly by volunteers (Mule Deer Foundation, Future Farmers of America) and by FWP personnel. This work has been occurring each year since 2009. Preliminary results indicate increased robustness of bitterbrush plants following removal of the conifer canopy and increased mule deer use in the treated areas. It is anticipated that work will be completed during summer 2012.
- 128 acres of aspen were treated. Treatment included mechanical removal of all conifers (Douglas fir and lodgepole pine), pole-size and larger, from within selected aspen stands and from a buffer of approximately 30 meters surrounding those stands.
- Over 200 acres of mixed conifer forest were treated within 7 distinct units. All units were irregular in shape and were separated from other units by draws, ridges, rock outcrops or Douglas-fir forest types. Mechanized ground based logging equipment removed all

EQC
July 19, 2012
Exhibit 10

From: Jay Kolbe [jaykolbe@hotmail.com]
Sent: Friday, October 28, 2011 5:13 PM
To: McDonald, Ken; Thompson, Mike
Subject: Ovando Mtn. Forest Restoration
Attachments: Ovando Mtn Forest Rest. Photos.zip

Ken-

We completed the majority of the Ovando Mtn. Project on time (barely), getting all equipment off the mountain by 10/21. To date we've treated 315 of the 354 project acres. A disjunct 40-acre patch of dead and dying lodgepole will be treated next summer before the slash is burned and roads are removed.

I'm very pleased with the results. Even immediately following harvest, the stands look great (see attached photos). The majority of the work was within old-growth (but encroached) Doug-fir and larch stands. These were thinned to a variable spacing typical of the site potential if periodic low-intensity fire were allowed to suppress understory development. Patches of younger trees were retained throughout as was cover along draws and ridge features. We retained relatively heavy slash loads to limit ground disturbance and cycle nutrients. The 100-acre aspen clone was treated by either removing or girdling large diameter fir within and in a buffer around it; small conifers were slashed. This should allow the clone to expand to at least what we know was present in the 1950s. Lots of hand work here.

Several contiguous and beetle-hit lodgepole stands were cut. We left what we could in patches hopefully large enough to withstand windthrow and placed them so as to provide wildlife screening cover and to hide those cuts from highway view.

Because of the relatively high retention and screening, unless you knew the project happened, from a distance you can't really tell we even treated the project area.

Here's some numbers, to date, in case they're useful.

Total volume harvested - **1.5** million board feet

Left to go - **250,000** board feet

Man hours - **8,982** (sawyers, equipment operators, log truck drivers, etc.--does not include processing, mill workers, etc)

Man days - **1,123**

Delivered volume represents >5% of Pyramid Mtn. Lumber's annual raw material requirements. Pyramid employs 145 people in Seeley Lake.

We'll go through the accounting next week but even with all the additional hand and skyline work we did to meet habitat objectives, the project will generate funds for the Forest Stewardship Account. I hope to see one payment this winter and use the value of the timber we still need to remove to cover the road removal and weed treatment costs.

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